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ABSTRACT

This report presents an updated review of employment projection and supply data as related to current job cluster program enrollment in the Portland (Oregon) School District. The methods for gathering the data are described and estimates for future enrollment needs are recommended for eighteen occupational clusters. Three fourths of the report is contained in an appendix which presents charts and data on Portland area employment estimates, growth estimates, average cluster enrollment, cluster completions, estimated enrollment needs, major areas of employment and estimated growth, and 1975-76 school and community profiles of Portland area high schools. Occupational Employment Statistics (OES) Title cluster assignments are also listed. (BL)

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AN ANALYSIS OF CLUSTER PROGRAM NEEDS IN THE PORTLAND PUBLIC SCHOOLS

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NATIONAL INSTITUTE OF EDUCATION

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An Analysis of Cluster Program Needs in the
Portland Public Schools

Purpose

This study was begun in conjunction with a Part C project funded through the Oregon Board of Education. The objectives of the project were to research and determine the uses of data in secondary school vocational program planning, and to apply such data to an updated review of Portland School District clusters. It is to the second objective to which this paper is directed.

The previous Career Cluster Development Study by Dave Fretwell, completed in August, 1974, pointed out the need for considering employment force projection data as a planning criteria and the importance of obtaining adequate information regarding the number of individuals being prepared for entry into cluster related occupations. It also recommended specific changes in the Portland cluster offerings. Since current Portland programs have been largely based on the 1974 Study and prior planning, a current review of demand data was deemed to be necessary in order to plan future programs based on the most current employment data.

In order to justify new and existing programs, we must have a close match between employment as forecasted through employment data projections, a better idea of the needs of students and the community, and a clearer perception of how our vocational programs can be planned and implemented in order to maximize student interest and success.

This paper will evaluate current cluster program enrollment in terms of the degree to which it matches the enrollment theoretically justified by employment projection data. Recommendations regarding program changes will be made, and some suggestions as to the organization and structure of vocational programs will be offered.

EMPLOYMENT DEMAND ESTIMATES

Because of the Career Program Planning System (CPPS) transition from Dictionary of Occupational Titles (DOT) to the Occupational Employment Statistics (OES) job title classification system, it was not possible to obtain new data projections from CPPS. Occupational Employment Statistics (OES) were used to provide 1978 employment and job opening estimates. In order to group the 1978 estimates of job openings, the following steps were taken.

1. Using current manpower summaries, OES occupational job titles, and the professional judgement of the Oregon Department of Education Manpower Analyst, the approximately 1150 OES occupational job titles were assigned to the eighteeen clusters.
2. OES estimated job openings for 1978 for the Portland Metropolitan Statistical Area (SMSA) were tabulated by cluster. (See Chart I) Since some titles might fit into multiple clusters, and some were not included in any cluster, a special grouping or "19th cluster" was established which included all titles not assigned to one of the eighteen clusters. This group made up approximately twenty percent of total OES employment.
3. Clark County comprises twelve percent of Portland SMSA, therefore, the figures for estimated openings were reduced by twelve percent.
4. The adjusted Portland SMSA was then roughly comparable to the Administrative Planning District Two. Knowing that Portland secondary school enrollment (1974-75) makes up approximately thirty two percent of District Two, the figures on estimated openings were reduced to that amount (32%) in order to theoretically match the proportion of the employment population with expected cluster enrollment and completion figures of Portland 1J.

5. Adjusted 1978 cluster employment estimates were then matched with Portland School District 1J completions to determine miss match areas. (Chart II shows a comparison between 1969-75 data projections and 1978 estimates.)

Although a purpose of the study was to update the 1974 Study, certain factors made it difficult to consider the current study as an extension of the previous one. As has been stated, the data estimates represent different years and are from OES data. Also, Portland 1J continues to experience a decline in total secondary enrollment, about eleven percent over the past ten years. Vocational enrollments have dropped proportionately. No attempts should be made to stress reliability or lack of reliability between the two studies. Only generalizations should be drawn from the data. If assumptions are to be drawn regarding trends, they should be done with extreme care.

OES data includes all wage and salary workers excluding those who are self-employed and those who are employed in on-farm occupations.

EMPLOYMENT SUPPLY

The employment supply data was obtained largely through the Secondary Education Report of Vocational Enrollment (SERVE) and the 1975 High School Follow Up Survey Report. It must be remembered that the SERVE report provides information only on high school preparations. Data regarding preparations from private schools, community colleges, and colleges and universities is not included. It is believed, however, that the majority of entry level employment occurs directly from high school, particularly in low skill-level jobs.

Because of some apparent limitations of the SERVE system, and the intent of this report, which is to provide data for long-range planning, it was thought to be appropriate to average the number of graduate completions over a three year period, 1973-74, 1974-75, and 1975-76. By doing so, high and low

points of graduate completion were eliminated, and a more accurate long-range picture of completions was available. An example of this problem may be seen in the accounting cluster in 1975-76. Of eighty-eight completions, only five graudated in 1976. It can be seen that in other years the number of graduate completions in that cluster were proportionately larger. (See Charts III and IV). It might also be noted that a mistake in course coding had been made prior to 1975-76, and some business courses not actually in accounting had been included in that cluster report. The problem has since been corrected.

Charts V and VI show graduate completion figures for 1976 and for the three year average. It should be remembered that total course completions far exceed cluster graduate completions. Theoretically, those numbers are included when returning students enroll in clusters in the twelth grade and subsequently graduate. Graduate completions were used in the 1974 Cluster Study and in this study, because they theoretically show immediate impact on the labor market. Completion ratios in the report do not report all course completions, they simply show the relationship between cluster graduate completions and total cluster course enrollment.

The figures shown in Charts V and VI indicate a considerable increase in cluster enrollment can occur before there is any danger of over-saturation. Although completion ratios are not precise statements about the number of students impacting the labor market over a period of time, they pretty well identify the numbers available for employment in a given cluster at a given time (graduation.)

Annual reviews of employment projection data and enrollment supply information should be accomplished in order to monitor proper cluster expansion.

FOLLOW-UP OF HIGH SCHOOL GRADUATES-1975

As has been stated, there is no way of knowing the precise number of completion graduates that impact the labor market, nor is there any certainty as to the time when their impact might occur. It was determined, however, that the primary supply planning factor will be program completions of graduates as reported in the SERVE Report.

The 1975 Follow-up Study reported students who found jobs directly after high school were most often working in marketing, food service, clerical, or mechanical occupations. Labor market projections indicate all of these areas except mechanical are high growth areas. Construction was the fourth largest employment source for males, and accounting and secretarial were the fourth and fifth largest areas of employment for females. The 1978 growth estimates also describe these occupations as high growth fields. (See Chart VII)

CLUSTER RECOMMENDATIONS

Agriculture — Both the 1976 data and the three year average show a very slight need for increased enrollment. Agriculture Makes up less than one percent of total Portland employment. The 1974 Study showed no need for increased enrollment, however current figures indicate that the equivalent of completions from approximately one or two new classes (15 to 30 students) could be accommodated in the labor market.

Marketing — Estimates for Marketing enrollment needs are up slightly from the previous study. The figures support the recommendations of the 1974 Study: implementation of approximately five new programs.

Health Services

Employment estimates for Health Careers are up considerably from previous study. The new figures indicate a need to maximize enrollments and completions in existing clusters and to consider means for increasing total completions. Where program output is minimal, consideration should be given to transfering staff and equipment to sites demonstrating greater likelihood for success. New clusters can be justified in schools where there is sufficient student and community interest. The Monroe cooperative program might be expanded.

Food Service

Employment projections for Food Service indicate virtually every completion can be employed. Before new training programs are begun, attention should be given to maximizing use of existing programs. Where incomplete usage of facilities exists, consideration of their cooperative use should be given. New programs might be started where student and community interest is high.

Accounting

Estimated Accounting employment is up, but the unusually large increase of needed enrollment is distorted, Enrollments and completions seem to have dropped because SERVE reports prior to 1975-76 inflated Accounting figures due to inaccurate coding. Also the majority of completions in 1975-76 were not graduates, therefore they did not appear as completions.

The 1974 Study indicated that any increase in Accounting enrollment might be accomplished by expanding enrollments in existing programs. Until new, more reliable data is available, this appears to be an appropriate

direction.

Clerical — The new employment projection data shows over twenty percent of the employment expansion is in this area. The data suggests that almost any number of additional Clerical completions could find employment. Each school should consider adding or significantly expanding its Clerical cluster.

Secretarial — The figures based on the three year average show a modest need for increased Secretarial enrollment; the 1976 data shows a larger need. The necessary additional enrollments might well be accomplished through increasing participation in present programs.

Mechanical — There is little or no apparent need for additional cluster enrollment at this time. Both sets of data would indicate the present employment demand can be well met through existing programs.

Construction — Additional completions in Building Construction are needed. Estimates are larger than those shown in the 1974 Study, indicating an intensified need for additional completions. A minimum goal should be to implement the recommendations of the 1974 Study.

Electronics — The need for additional Electronics growth appears to be in line with the 1974 recommendations. As many as two or three programs might be added, or more complete utilization of existing programs might provide the needed program completions.

Metals	Additional programs are necessary. Recommendations are consistant with those of the 1974 Study, which stated at least one new program should begin in each Area.
Child Care	No program growth is needed in Child Care. Employment demand projections are extremely small. Portland 1J is now producing a slight over-supply of completions.
Clothing	Clothing makes up approximately two percent of 1978 projected employment. In 1976, there were only four program completions. This cluster might be explored as a possibility for expansion.
Inst. & Home Mgmt.	Employment demand estimates indicate nearly five percent of the labor demand will be in Institutional and Home Management. The feasability of beginning programs in this area should be strongly considered.
Drafting	Drafting related occupations account for only about .6% of 1978 estimated labor demand. Current program enrollments might be expanded to increase the small number of additional completions that are needed.
Graphic Arts	No new programs are necessary. Current programs can well be expanded to meet the minimal need for additional completions.
Service Occupations	Nearly fourteen percent of estimated 1978 employment openings will be in Service Occupations. Completions are currently very small in proportion. As stated in the 1974 Study, significant expansion is needed in this area.
Forest Products	There is little projected labor demand (.62%) for Forest Products occupations in the Portland Area, and

there are currently very few completions. The few additional completions that are indicated might be achieved by expanding the Lincoln Program and/or perhaps making it a cooperative program.

GENERAL RECOMMENDATIONS

CPPS

Request ODE to provide leadership and necessary human and financial resources to reprogram the CPPS. Work should be carried out in cooperation with the Oregon Employment Service and Oregon State University. The system must be capable of updating employment estimates by cluster as soon as the latest Occupational Employment Statistics are available.

SERVE

The SERVE must be completely reviewed to identify needs of the ODE and individual schools and to determine how those needs can be more effectively met. Some specific needs of secondary schools are:

1. Greater quality control over the recording of SERVE information.
2. A method for recording cluster completions that occur prior to graduation so an accurate number of graduates of a given class can be identified as having completed a cluster. Presently, if an eleventh grader completes a cluster course, it would not show as a completion a year later, when his class graduates.
3. Related to problem two, Portland cluster enrollment

should be encouraged for grades eleven and twelve. Presently, Portland nineth and tenth graders are enrolled in some cluster courses.

4. Identify planning and evaluation uses of SERVE data at the building level. Implement more complete, effective use of SERVE data.

Planning

Continue planning cluster programs simultaneously at the school, area, and district levels, maximizing the use of employment projection data and the other planning factors identified in the Guide to the Use of Data In Vocational Program Planning. Use of faculty input and advisory committees should be increased, particularly in curriculum planning.

Follow-Up Study

The State High School Follow-Up Survey should be re-examined to determine ways of increasing graduate responses and to maximize its vocational planning uses for vocational education. Efforts should be made to develop local follow-up procedures. Coordination of Oregon Department of Education and activities in local school districts is essential.

APPENDIX

A

CHARTS and FIGURES

CHART I

State-Portland SMSA 1978 Employment Estimates

Cluster	Estimated State Employment	Estimated PSMSA Employment	Estimated State Growth	Estimated PSMSA Growth
Agriculture	7,140	1,890	379	173
Marketing	130,100	74,920	6,308	3,558
Health Services	43,010	26,490	4,239	3,156
Food Service	620	37,450	6,221	3,011
Accounting	47,410	27,560	3,483	2,044
Clerical	87,570	52,680	6,621	4,225
Secretarial	23,520	14,570	2,127	1,377
Mechanical	45,020	22,290	1,862	824
Construction	42,070	19,500	1,726	961
Electronics	16,490	10,430	556	412
Metals	31,870	23,490	1,343	1,067
Child Care	630	170	53	16
Clothing	8,030	6,860	547	509
Inst. & Home Mgmt.	29,880	14,670	2,336	1,249
Drafting	3,990	2,950	199	151
Graphic Arts	4,630	2,770	186	166
Service Occupations	101,130	52,410	6,455	3,680
Forest Products	32,980	5,120	454	77
Other	184,130	102,120	7,387	4,600
	840,220	498,340	52,682	31,256

Portland SMSA = Multnomah, Washington, Clackmas, Columbia, and Clark Counties

Growth Estimates = Expansion and replacement estimates

CHART II

COMPARISON OF GROWTH ESTIMATES - 1969-75 / 1978

Cluster	Expansion and Replacement, 1969-75		Expansion and Replacement, 1978	
	District Two	Portland 1J	District Two	Portland 1J
Agriculture	128	41	152	49
Marketing	1,992	637	3,131	1,002
Health Services	1,529	489	2,777	873
Food Services	1,189	380	2,650	848
Accounting	746	239	1,799	576
Clerical	1,719	553	3,118	1,190
Secretarial	662	212	1,212	388
Mechanical	686	219	725	232
Construction	728	233	846	271
Electronics	530	170	363	116
Metals	793	254	939	300
Child Care	71	23	14	4
Clothing	299	96	448	135
Inst. & Home Mgmt.	805	258	1,099	352
Drafting	96	31	133	43
Graphic Arts	170	54	146	47
Service Occupations	1,407	450	3,208	1,036
Forest Products	202	65	68	22

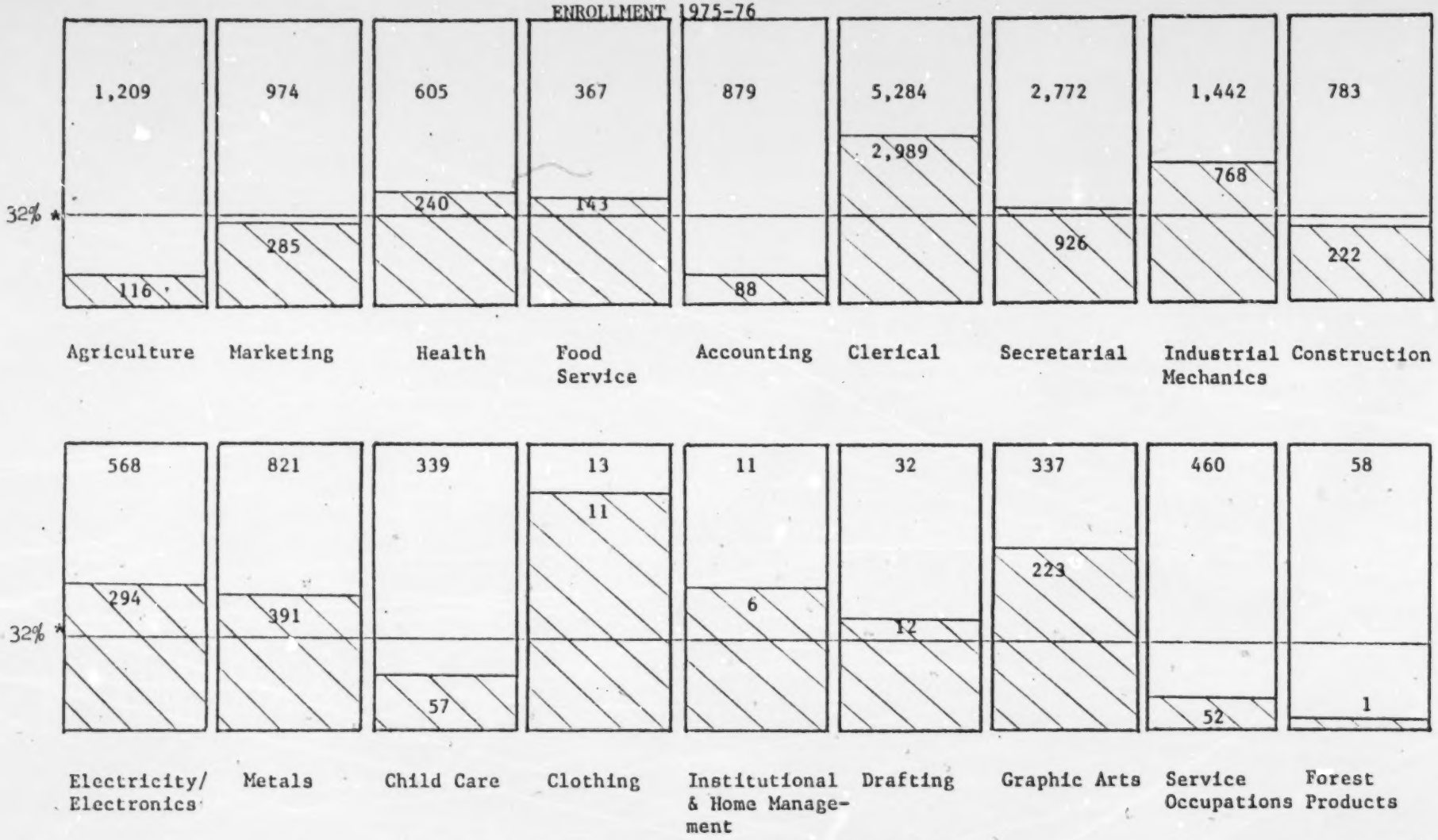
CHART III

AVERAGE CLUSTER ENROLLMENT

Cluster	1973-74		1974-75		1975-76		Average	
	Total	Grades 11&12	Total	Grades 11&12	Total	Grades 11&12	Total	Grades 11&12
Agriculture	140	124	129	114	116	110	128	116
Marketing	243	222	247	214	285	196	258	211
Health Services	518	374	431	331	240	218	396	308
Food Services	173	111	223	175	143	94	180	127
Accounting	883	516	734	377	88	18	665	304
Clerical'	1,974	1,144	2,288	1,112	2,989	1,330	2,317	1,185
Secretarial	763	530	560	424	926	705	750	553
Mechanical	747	659	766	694	768	615	760	656
Construction	305	278	367	291	222	209	298	259
Electronics	316	287	308	248	294	240	305	259
Metals	294	256	372	311	391	286	252	284
Child Care	189	118	163	114	57	55	136	96
Clothing	59	34	33	21	11	9	34	21
Inst. & Home Mgmt.	62	31	16	10	6	6	28	16
Drafting	53	41	25	13	12	12	30	22
Graphic Arts	145	117	170	137	223	124	179	126
Service Occupations	369	246	388	232	52	52	270	177
Forest Products	31	21	77	44	1	1	36	22
Totals	7,264	5,108	7,297	4,862	6,824	4,255	7,128	4,742

PORTLAND/DISTRICT TWO CLUSTER

ENROLLMENT 1975-76

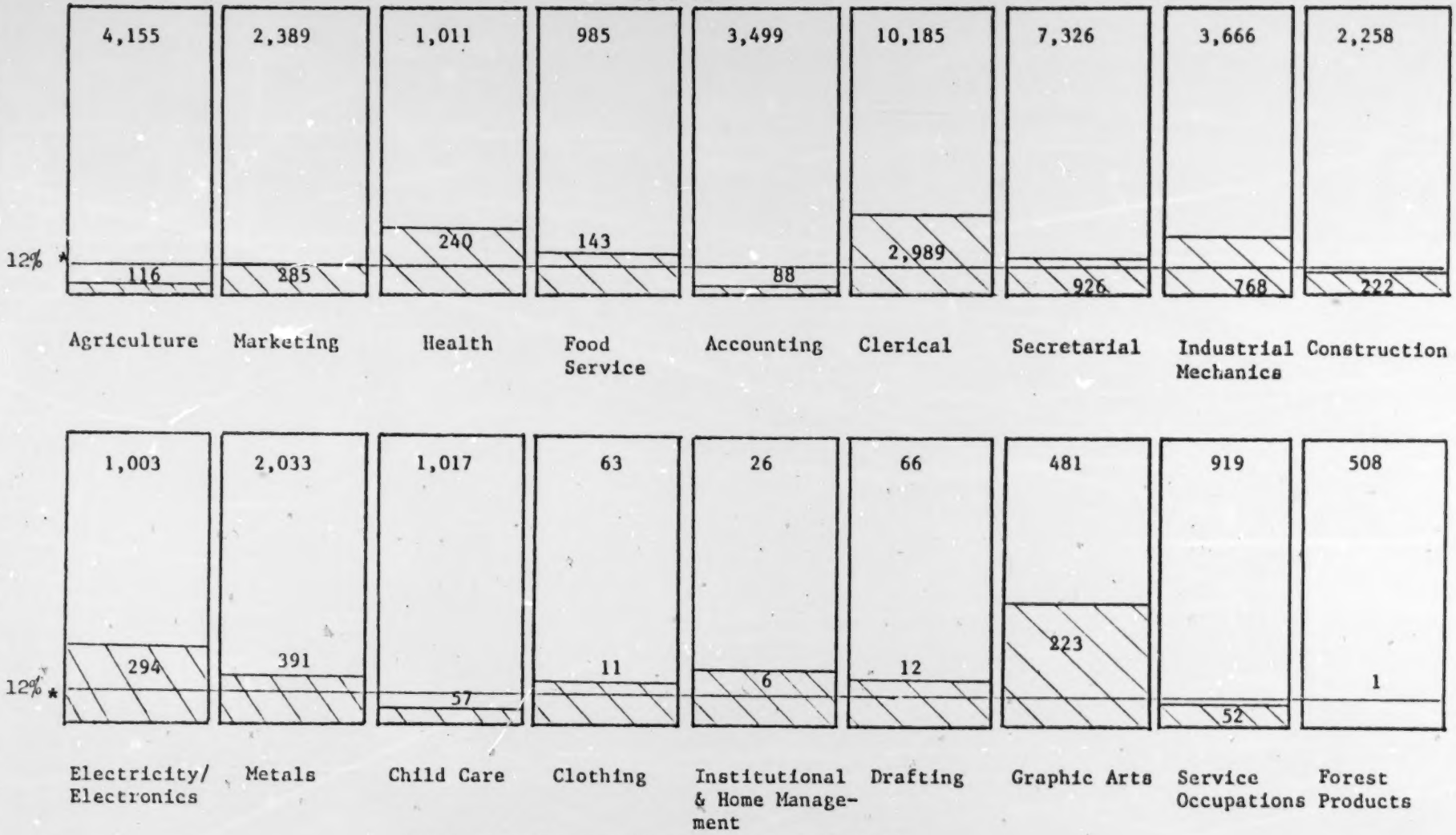


* 32% of District Two enrollment is in Portland 1J

FIGURE 2

STATE/PORTLAND CLUSTER ENROLLMENT

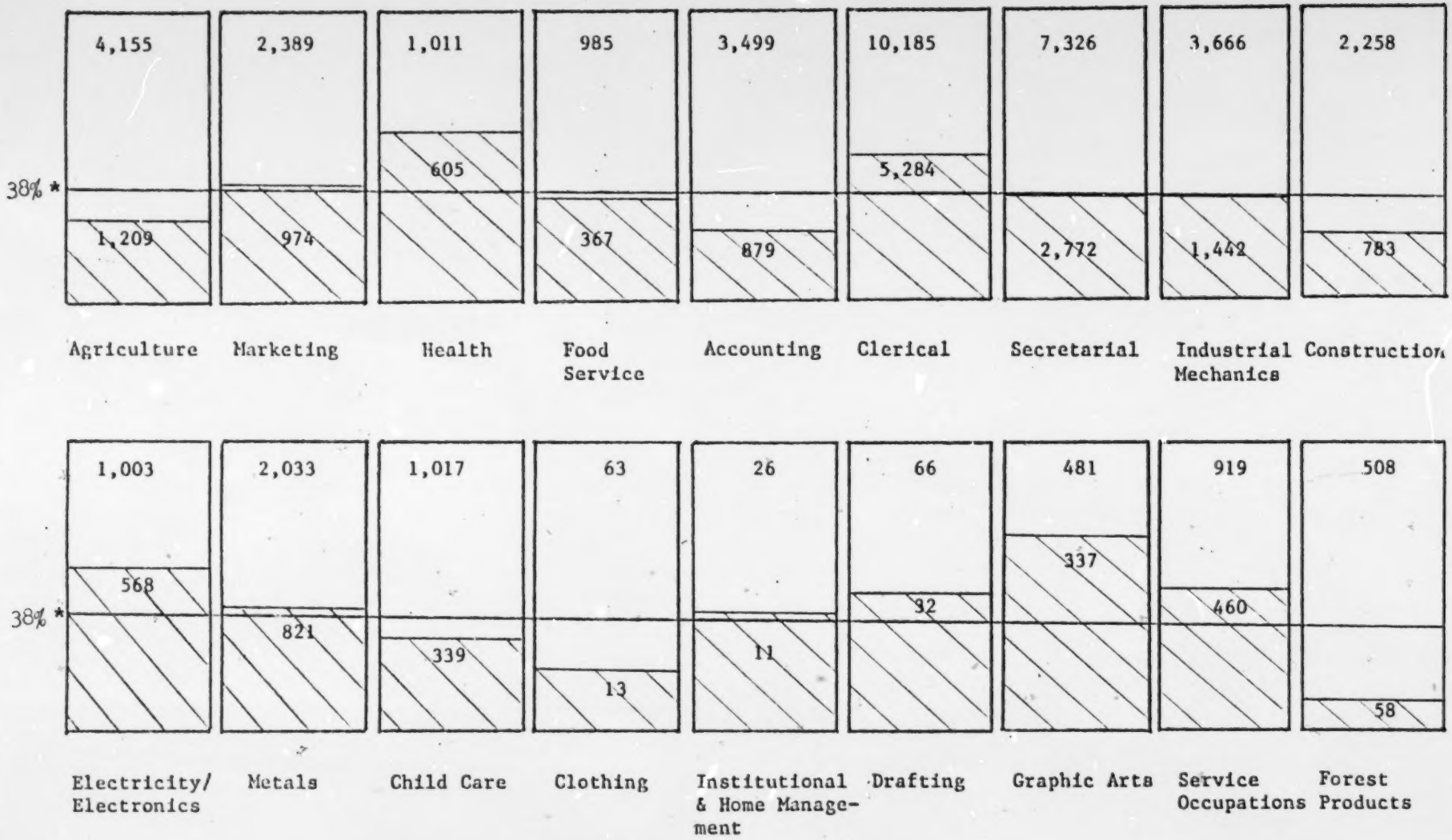
1975-76



* 12% of State enrollment is in Portland 1J

STATE/DISTRICT TWO CLUSTER

ENROLLMENT 1975-76



* 38% of State Enrollment is in District Two

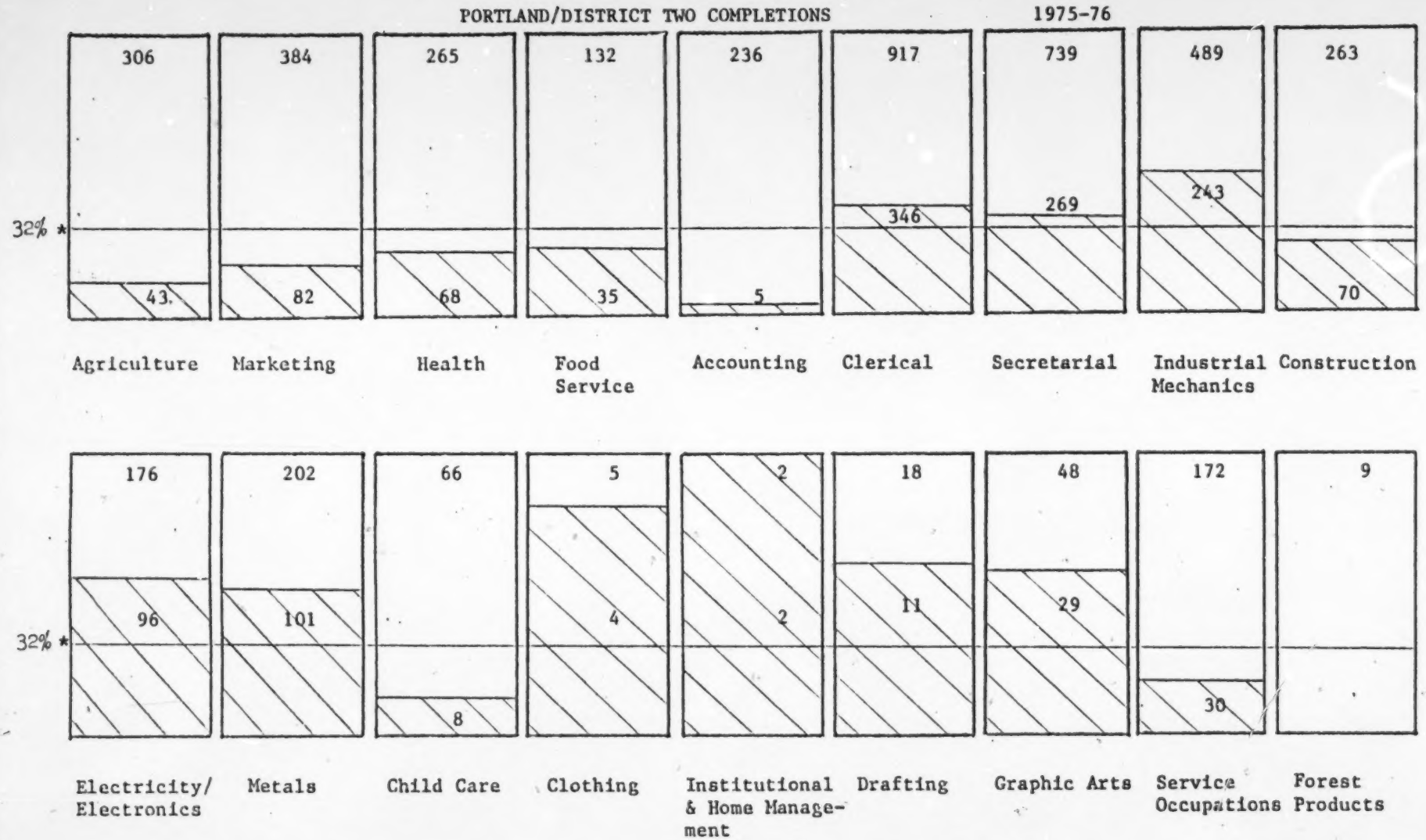
CHART IV

Cluster Completions - Graduates and Returning Students

Cluster	1973-74		1974-75		1975-76		Average	
	Total Comp.	Grad. Comp.	Total Comp.	Grad. Comp.	Total Comp.	Grad. Comp.	Total Comp.	Grad. Comp.
Agriculture	115	37	107	33	90	43	104	38
Marketing	178	68	201	76	212	82	197	75
Health Services	460	198	371	161	188	68	340	142
Food Services	129	26	157	67	102	35	129	43
Accounting	622	165	516	118	88	5	409	96
Clerical	1,640	386	1,977	344	2,501	341	2,039	357
Secretarial	696	192	509	172	812	269	672	211
Mechanical	531	188	624	243	449	243	535	225
Construction	169	67	349	141	121	70	213	93
Electronics	216	94	264	105	184	96	221	98
Metals	168	66	322	131	246	101	245	99
Child Care	139	35	132	35	55	8	109	26
Clothing	49	12	27	7	10	4	29	8
Inst. & Home Mgmt.	52	12	18	4	4	2	25	6
Drafting	28	9	25	2	11	11	21	7
Graphic Arts	110	35	146	46	63	29	106	37
Service Occupations	318	91	336	89	47	30	234	70
Forest Products	26	9	70	13	1	-	32	7
Totals	5,646	1,690	6,151	1,787	5,189	1,442	7,392	1,640

* Due to a coding error, enrollment figures for 1973-74 and 1974-75 included a number of non-accounting students.

Figure 4

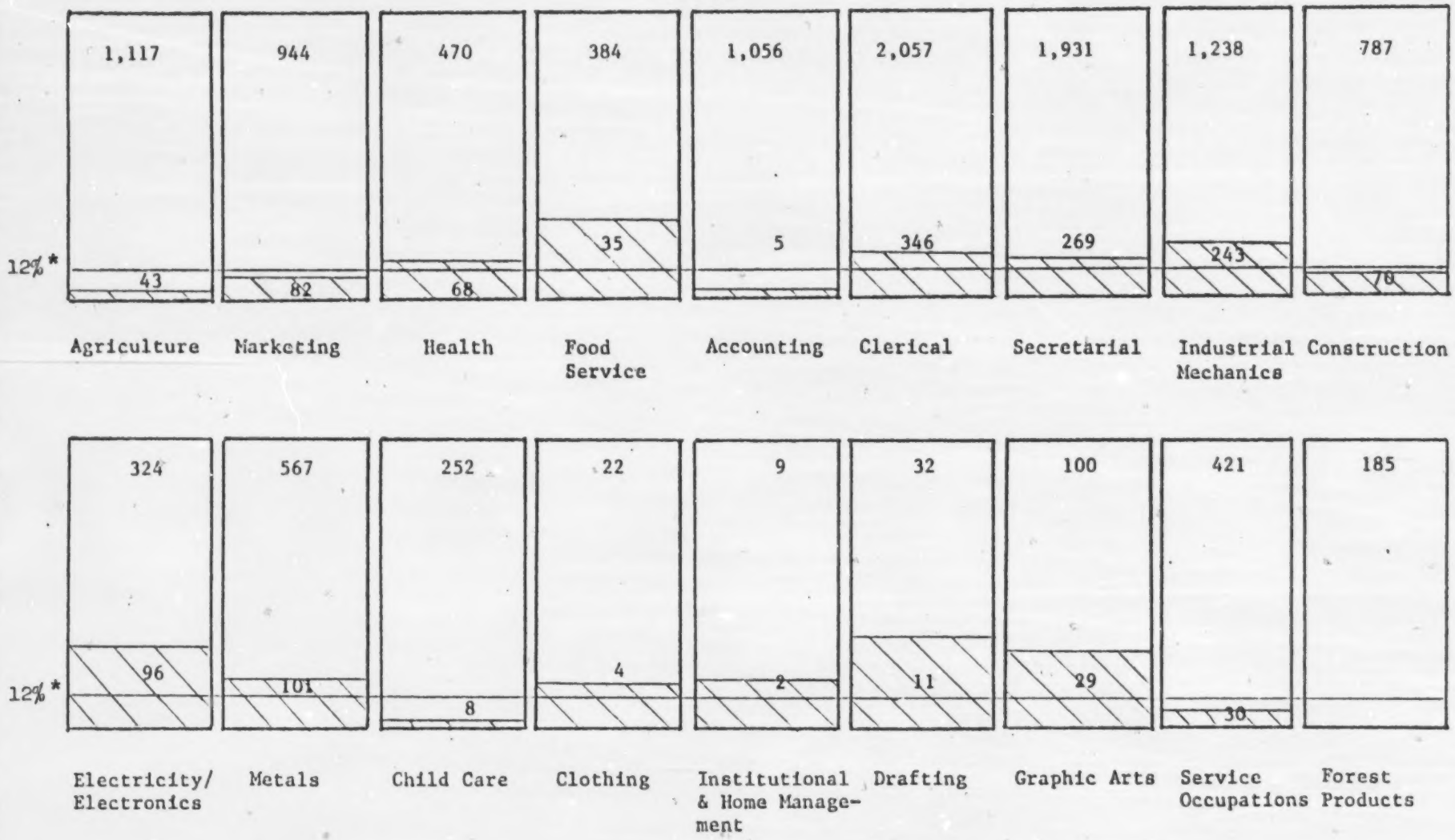


* 32% of District Two enrollment is in Portland

Figure 5

STATE/PORTLAND CLUSTER COMPLETIONS

1975-76

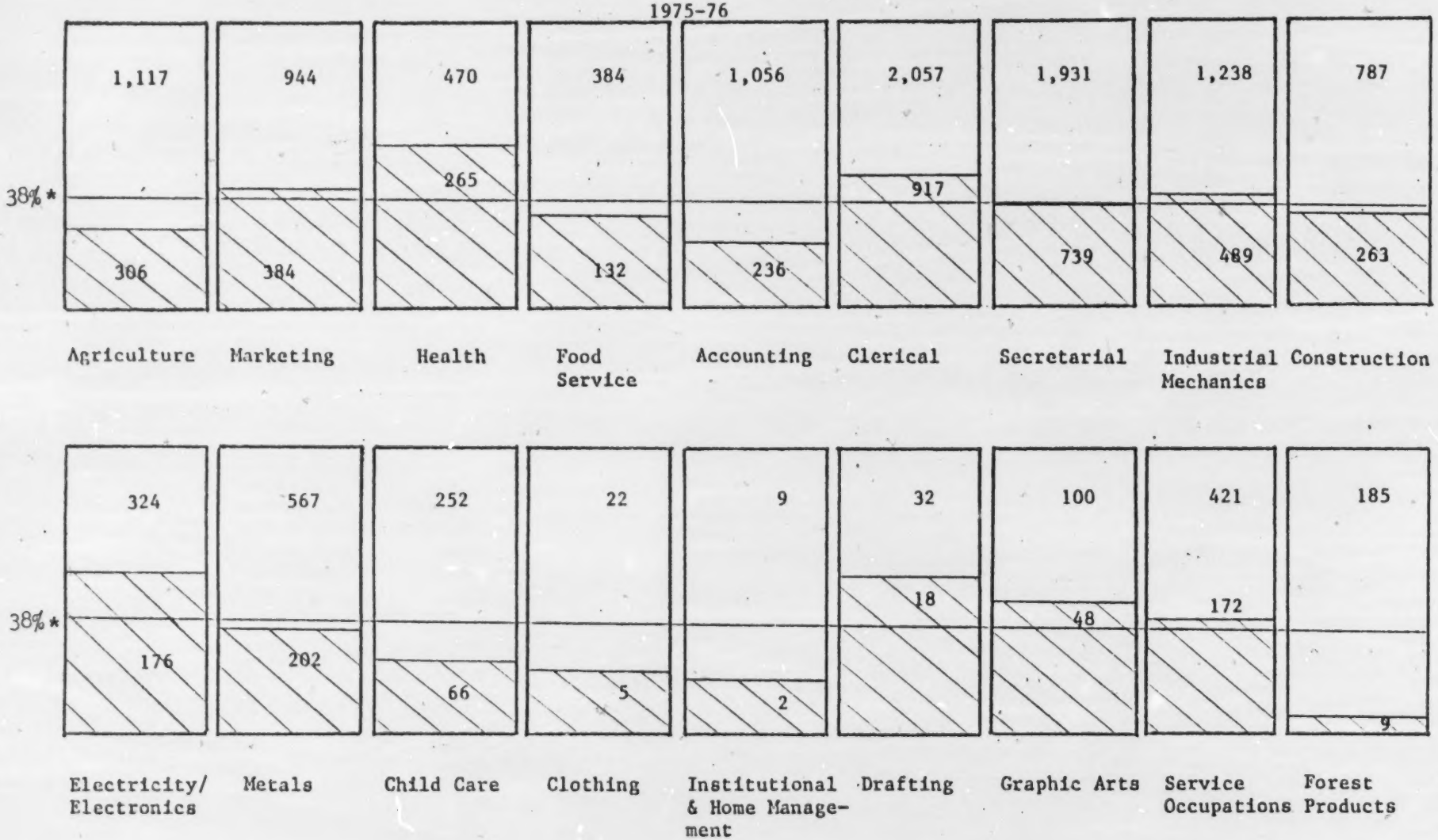


* 12% of State enrollment is in Portland 1J

Figure 6

STATE/DISTRICT TWO COMPLETIONS

1975-76



38% of State enrollment is found in District Two

CHART V

Estimated Enrollment Needs

1976 Graduates

Cluster	1978 Labor Demand Portland 1J N	%	Completions Portland 1J N	%	Addition Complet. Needed	Ratio Comp/ Enroll.	Enroll Needed
Agriculture	49	.6	43	3	6	1/2.7	16
Marketing	1,002	13.3	82	5.7	920	1/3	2,760
Health Services	889	11.8	68	4.7	821	1/3.5	2,874
Food Services	848	11.3	35	2.4	813	1/4	3,252
Accounting	576	7.6	5	.3	571	1/17.6	10,050
Clerical	1,190	15.8	341	23.7	849	1/8.7	7,386
Secretarial	388	5.2	269	18.7	119	1/3.4	405
Mechanical	232	3.1	243	17	-11	1/3.2	None
Construction	271	3.6	70	4.8	201	1/3.2	643
Electronics	116	1.5	96	6.7	10	1/3	30
Metals	300	4	101	7	199	1/3.8	756
Child Care	5	-	8	.5	-3	1/7	None
Clothing	143	2	4	.3	139	1/2.7	375
Inst. & Home Mgmt.	352	4.7	2	-	350	1/3	1,050
Drafting	43	.6	11	.8	33	1/1.1	36
Graphic Arts	47	.8	29	2	18	1/7.7	139
Service Occupations	1,036	13.8	30	2.1	1,006	1/1.7	1,710
Forest Products	22	.62	-	-	22	+	22+
Total	7,509	100.3	1,437	99.7	6,063		32,260

* Due to a coding error, enrollment figures for 1973-74 and 1974-75 included a number of non-accounting students.

CHART VI

Estimated Enrollment Needs

Average 1973-74, 74-75, 75-76 Graduates

Cluster	Labor Demand Portland 1J N	%	Completions Portland 1J N	%	Addition Complet. Needed	Ratio Comp/ Enroll.	Enroll Needed
Agriculture	49	.6	38	2.3	11	1/3.6	40
Marketing	1,002	13.3	75	4.6	927	1/3	2,781
Health Services	889	11.8	142	8.6	747	1/3	2,241
Food Services	848	11.3	43	2.6	805	1/4	3.220
Accounting	576	7.6	96	5.8	480	1/7	3,360
Clerical	1,190	15.8	357	21.8	1,094	1/7	7,658
Secretarial	388	5.2	211	12.9	177	1/3.5	89
Mechanical	232	3.1	225	13.7	7	1/3	21
Construction	271	3.6	93	5.7	178	1/3	534
Electronics	116	1.5	98	5.9	18	1/3	54
Metals	300	4	99	6	201	1/25	503
Child Care	5	-	26	1.6	-21	1/5	None
Clothing	143	2	8	.5	135	1/4	540
Inst. & Home Mgmt.	352	4.7	6	.4	346	1/4.6	1,592
Drafting	43	.57	7	.43	36	1/4	144
Graphic Arts	47	.82	37	2.3	10	1/5	50
Service Occupations	1,036	13.8	70	4.3	966	1/4	3,864
Forest Products	22	.62	7	.43	15	1/5	75
Total	7,509	100.3	1,638	99.86	6,132		26,766

Major Areas of Employment, Class of 1975

CHART VII

Cluster	FREQUENCY OF EMPLOYMENT % Males	% Females	PERCENTAGE OF 1978 EST. GROWTH %
Clerical		17.9	15.8
Marketing	16.2	14.2	13.3
Food Service	8.9	13.9	11.3
Mechanical	10.3		3.1
Accounting		8.4	7.6
Secretarial		8.0	5.2
Construction	7.4		3.6

SCHOOL & COMMUNITY PROFILES OF HIGH SCHOOLS - 1975-76

	Jackson	Jefferson	Lincoln	Roosevelt	Wilson	Adams	Madison	Marshall	Benson	Monroe	Cleveland	Franklin	Grant	Washington
Enrollment	1042	1013	1111	1376	1680	1145	1924	1638	1900	547	1703	1890	1641	853
Staff	63	75.7	65.5	84.3	95.2	75.8	110.2	94.2	102.3	34.1	90.4	99.7	124.7	61.1
% Student Mobility (1974-75)	8.2	22.4	11.4	17.3	7.0	31.9	16.9	13.9	5.0	10.1	15.6	8.6	11.8	17.6
% Attendance (1974-75)	91.2	86.4	90.7	85.1	92.4	84.7	90.1	89.2	93.5	92.2	87.6	88.9	90.3	89.5
Pupil-Teacher Ratio	23.2	18.4	21.6	21.8	22.1	20.8	23.3	22.8	21.9	20.2	22.9	23.1	21.6	17.6
% H & W Famlies	89.0	80.9	83.2	70.1	88.6	79.6	82.2	81.0			81.9	82.8	80.4	77.1
Median Grade Comp. (25 & older)	13.0	12.0	14.1	11.9	13.5	12.1	12.5	12.0			12.3	12.1	12.5	12.1
Median Family Income	16,234	12,253	19,682	12,305	19,229	12,568	14,102	12,686			13,933	13,430	14,110	11,532
% Welfare Families (1974-75)	1.5	51.8	4.7	22.9	2.0	31.5	7.7	12.1			8.2	10.2	16.5	33
No. Blacks/%	80 / 7.7	452 / 44.6	88 / 7.9	98 / 7.1	42 / 2.5	404 / 35.3	98 / 5.1	38 / 2.3	129 / 6.8	96 / 17.6	117 / 6.9	49 / 2.6	336 / 20.5	164 / 19.2
Total No. Minorities/%	89 / 8.7	473 / 46.7	113 / 10.2	159 / 11.6	65 / 3.9	441 / 38.6	155 / 8.1	85 / 4.5	199 / 10.5	114 / 20.9	227 / 13.4	152 / 8.0	388 / 23.6	209 / 24.5

APPENDIX

B

OES TITLE CLUSTER

ASSIGNMENTS

AGRICULTURE

Agricultural Engineer
Agricultural Scientist
Biological Scientist
Life Scientist
Biological Scientist
Life Scientist
Biological Science Tech.
Veterinarian
Fish & Game Wardens
Miller Food
Feed Pellet Mill Oper.
Grain Receiver
Exterminator
Termite Treater
Termite Treater Helper
Zoo Caretaker/or Aquar.
Grounds Keeper
Gardener & Grounds Keepers
Animal Caretaker

MARKETING

Actuary
Market Research Analyst
Media Analyst
Public Relations Practitioner
Bank Cashier
Bank Manager
Loan Officer
Operations Officer
Trust Officer
Buyer, Wholesale and Retail Trd.
Purchasing Agent &/or Buyer
Right of way Agent
Manager, Merchandise
Manager Sales
Assessor
Director, Funeral
Manager Property
Contribution Solicitor
Estate Planner
Manager Insurance Office
Fashion CoordinatorManager Store
Manager, Parts Dept.
Wholesaler
Field Representative
Film Booker
Media Buyer
Account Executive Advertising
Demonstrator
Hospital Insurance Rep.
Underwriter
Placer
Sales Agent, Insurance
Real Estate Broker
Sales Agent, Real Estate
Broker & Market Opr.
Broker Floor Representative
Portfolio Manager
Sales Agent, Financial Service
Sales Agent, Securities
Sales Representative
Sales Clerks
Vendor
Sales Agent/Clerk (Serv-Cons.)
Crating and Moving Estimate
All Other Sales Representatives
All Other Sales Workers
New Accounts Teller
Teller, Head
Teller
Car Rental Clerk
Order Clerk
Telephone Ad Taker News
Mark-up Worker
Claims Examiner
Investigator
Claim Adjuster
Freight Handler
Messenger Bank
Messenger
Appraiser Real Estate
Shipping & Receiving Clerk
Checker Fitting Room
Stock Clerk
Traffic Agent
Weigher
Appraiser
Chief Credit Analyst
Credit Analyst
Title Examiner
Claims Clerk
Loan Closer
Credit Authorizer
Security Cashier
Policy Change Clerk
Safe Deposit Clerk
Title Searcher
Transfer Clerk
Marker
Rate, Clerk, Freight
Merchandise Displayer/Window Tri.
Shipping Packer
Billposter

MARKETING cont.

Delivery Driver & Route Worker
Order Filler
Bagger
Stock Clerk, Sales Floor

HEALTH SERVICE

Medical & Dental Tech.
Microbiology Technologist
Cytotechnologist
Histologic Technologist
Nuclear Medical Technologist
Medical Lab Technologist
All Other Med. & Dental Tech.
Dental Hygienist
Medical Record Librarian
X-Ray Technician
Radiologic Technologist
Artificial App. Maker
Surgical Technician
Biochemistry Technologist
Electrocardiograph Technician
Electroencephalograph Technician
Embalmer
Chiropractor
Dentist
Dietition/Nutritionist
Optometrist
Pharmacist
Physician &/or Surgeon
Nurse Professional
Physical Therapist
All other Therapists
Speech & Hearing Clinicians
Audiometrist
Corrective Therapist
Inhalation Therapist
Occupational Therapist
Manual Arts / Recreation Therap.
Psychologist
Dental Laboratory Technician
Optician Disp. &/or Optic Mech
Ambulance Driver
Dental Assistant
Ambulance Attendant
Physicians Assistant
Medical Lab Assistant
Occupational Therapy Aide
Pharmacy Helper
Nurse Aide / Orderly
Psychiatric Aide
Medical Assistant
Licensed Practical Nurse

FOOD SERVICES

Manager, Restaurant
Director Food & Beverage
Baker Bread
Baker
Bench Hand
Cake Decorator
Cutting Mach. Oper. Food
Boner Meat
Boner Poultry
Butcher All Around
Carcass Splitter
Fish Cleaner &/or Butcher Fish
Butcher/Meat Cutter (Exc. Manuf.)
Pickler Prepared Foods
Retort Oper.
Separator Oper. Shellfish
Shellfish Processing Mach. Tender
Brine Maker
Blanching Mach. Oper.
Belter Oper.
Molder, Machine
Roaster Coffee
Sugar Boiler
Extruder Oper.
Candy Maker
Doughnut Maker & Mach. Oper.
Dividing-Mach/Dough-Brake Mach O
Cracker & Cooky Mach Oper
Clarifier
Enrobing Mach. Oper.
Processor Grain
Cook &/or Cooker
Extractor &/or Extractor Plant O
Oven Operator, Automatic
Centrifuge/Centrifugal Oper. Food
Drier Oper. Food or Tobacco
Washer Agricultural Produce
Cannery Worker
Still Operator
Meat Grinder
Baker Helper
Cheese Maker Helper
Chicken Cutter
Cooler Room Worker (Meat)
Decorator Bakery Products
Ingredient Scaler
Poultry Dresser/Evisorator
Shellfish Shucker

FOOD SERVICES cont.

Skinner
Smoker
Splitting Mach. Feeder
Sticker
Stunner
Bartender
Room Service Assistant
Cook
Cook, Short Order
Cook, Restaurant
Cook Institutional
Counter Attendant, Cafeteria
Host/Hostess
Waiter or Waitress
Food Service Worker
Kitchen Helper
Salad Maker
Food Prep. & Svc. Worker Fast Food
All Food Service Workers
Pantry, Sandwich/Coffee Maker

ACCOUNTING

Financial Analyst
Accountants & Auditors
Tax Examiner
Bookkeeping & Billing Mach. Oper.
Proof Mach. Oper.
Accounting Clerk
Audit Clerk
Bookkeeper Hand
Budget Analyst
Cashier
Control Clerk Auditing
Payroll &/or Timekeeping Clerk

CLERICAL

Computer Programmer
Computer Programmer Business
Computer Programmer Sci & Tech
Systems Analyst EDP
Systems Analyst Business
Systems Analyst Sci & Tech
Town Clerk
Portmaster/Mail Superintendent
Strike on Mach. Oper.
Transcribing Mach. Oper.
Typist
Linecasting Mach. Keyboard
Monotype Keyboard Oper.
Photo Typesetting Mach. Key
Transit Clerk
Food Controller
Calculating Machine Operator
Computer Oper.
Peripheral Equip. Oper
Duplicating Mach. Oper
Offset Duplicating Mach. Oper
Duplicating Machine Operator
Key Punch Oper
Tabulating Mach Oper
Office Mach. Oper
Addressing Mach. Oper
Inserting &/or Labling Mach.
All other Office Machine Oper.
Clerical Supervisor
Collector
Counter Clerk
Desk Clerk
Circulation Clerk
Classified-Ad Clerk
Survey Worker
Production Clark
Control Clerk Data Processing
File Clerk
Personnel Clerk
Postal Mail Carrier
Mail Clerk
Mailer
Meter Reader Utilities
Postal Service Clerk
Proofreader Compos Room
Information Clerk
Receptionist
Switchboard Op &/or Receptionist
Procurement Clerk
Stock Clerk Storeroom & Warehouse
Telegraph Operator
Switchboard Oper.
Central Office Operator
Cost Estimator
Adjustment Clerk
Checking Clerk
Credit Reporter &/or Investigator
Credit Reference Clerk
Insurance Clerk Medical
Gas Dispatcher
Actuarial Clerk
Brokerage Clerk
Margin Clerk
Rater

CLERICAL cont.

Reinsurance Clerk
Statistical Clerk
Worksheet Clerk
Counter
Court Clerk
Crew Scheduler
Dividend Clerk
Call-Out Oper.
Cancelation Clerk
Correspondence Clerk
Credit Card Clerk
Estimator, Media Clerk
General Clerk
In File Oper.
Insurance Clerk
Reader
Real Estate Clerk
Statement Clerk
Traffic Clerk
Service Representative
All Other Office Clerical Worker
All Other Plant Clerical Workers
All Other Clerical

SECRETARIAL

Secretary
Stenographer

MECHANICAL

Mechanical Engineer
Mechanical Engineering Tech.
Manager, Auto. Svc. Dept.
Service Clerk
Millwright
Refridgeration Mechanic
Mechanic Aircraft
Auto Seat Cov Convert. V Tp Instn.
Mechanic Automotive
Diesel Mechanic
Automobile Repair Service
Farm Equipment Mechanic
Household Appliance Repairer
Gas Servicer
Household-Appliance-Installer
Loom Fixer
Office Mach. Serv. Cash Reg.
Car Repairer
All Other Mechanics & Repairers
Locomotive Firer
Eng. Equipment Mech.
Hydroelectric Mach Mechanic
Mine Machinery Mechanic
Marine Mechanic
Mechanic Maintenance
Treatment-Plant Mechanic
Knitting Machine Fixer
Machine Set-Up Oper. Paper Goods
Ship Engineer
Mechanics & Repairers
Bicycle Repairer
Gasoline Eng. Or Mower Rep.
Gunsmith
Laundry Machine Mechanic
Locksmith
Photographic Maintenance
Coin Machine Servicer
Instrument Mechanic
Maintenance Repairer, Gen. Utility
Pinsetter Mechanic-Automatic
Forming Machine Upkeep Mechanic
Sewing Machine Mechanic
Ship Rigger
Driller, Hand
Driller, Machine
Rotary Drill Operator
Gas and Oil Servicer
Lubrication Servicer
Trailer-Rental Attendant
Tire Changer
Lube Servicer/Fuel Pump Attendant
Marine Svc. Stat. Atten.
Oiler
Stationary Boiler Firer
Firer, Kiln
Furnace Tender &/or Burner Tender
Firer, Marine
Auto Spring Coil Mach. Oper.
Tire Fabricator &/or Repair
Mechanic Helper Auto
Die Mounter
Fire Inspector
Fire Fighter
Fire Officer

CONSTRUCTION

Civil Engineer
Surveyor
Urban & Regional Planner
Construction Inspector

CONSTRUCTION cont.

Superintendent, Construction
Carpenter
Ship Wright
Brick Layer
Stonemason
Refractory Material Repairer
Tractor Oper.
Cement Mason
Concrete Rubber
Concrete Stone Finisher
Floor Layer
Floor Sanding Ma Oper.
Painter Maintenance
Painter Struc. Steel
Water Proofer
Paperhanger
Plasterer
Stucco Mason
Plumber &/or Pipefitter
Roofer
Tile Setter
Asphalt-Mixing-Machine Tender
Concrete-Mixer Operator
Dredge Operator
Form Tamper Opr. or Tamp Op.
Heavy Equip. Oper. Const. Mach.
Central Batch Plant Oper.
Sign Erector
Water Meter Installer
Cabinet Maker
Carpet Cutter &/or Layer
Crane Op/Derrick Op & Hoist Op.
Furniture Finisher
Glass Installer
Glazier
Conduit Mechanic
Surveyor Helper Rod, Chain/Light
Dry-Wall Applicator
Lather
Taper
Asphalt Belnder
Asphalt-Mixing-Machine Tender
Asphalt-Plant Oper.
Coating Mixer Tender
Roof Cement & Paint Maker
Tinter Paints
Decorator
Rubber Furniture
Painter, Production
Glazier, Stained Glass &/or Joine
Block Making Mach Oper.
Concrete Stone Fabricator
Concrete Vault Maker
Coater Roofing Felt
Laminating Mach. Op. Furniture
Cement Pmp &/or Con Pmp Opr
Shaper Hand
Pipe Stripper
Carpenter Helper
Air Hammer Operator
Ground Helper
Pipe Layer
Reinforcing Iron Worker
Asbestos and Insul Work Help
Bricklayer Help
Cement Mason Help
Painter Help
Plasterer Help
Plumber Pipefitter Help
Roofer Help
Stone Mason Help
Tile Setter Help
Stucco Mason Help
Highway-Maintenance Worker
Helper Trades
All Other Helpers Trades
Septic-Tank Services

ELECTRONICS

Electrical/Electronic Engineers
Electrical & Electronic Tech
Broadcast Tech
Electronic Mechanic
Radio Operator
Electrician
Electric Meter Installer
Radio Mechanic
TV Ser/Repair, Radio/Tape Rec Rep
Cable Splicer
Line Erector/Installer-Repairer
Trouble Shooter
Elect. Track Switch Maint.
Cable Installer
Power Reactor Operator
Substation Operator
Switchboard Oper. Generating Plan
Dispatcher, Load
Protective Signal Inst.
Central Office Repairer
Electrician Office
Frame Wirer
Installer, Rep. &/or Sect. Main
Station Installer

ELECTRONICS cont.

Telegraph Eq. Maintainer
Teletype Installer
Trouble Locator, Test Desk
Automatic Maintainer
Electric Motor Repairer
Electric Tool Repairer
Electric Instrument Rep.
Electromedical Equipment Repairer
Electolytic Cell Maker/Repairer
Coil Finisher
Wirer, Electronic
Core Winding Operator
Coil Winder
Corrosion Control Fitter

METALS

Industrial Engineer
Safety Engineer
Metallurgist & Metallurgical Engineer
Tool Programer, Numberical Control
Model Maker
Metal Fabricator
Lay-out Worker, Structural Steel
Structural Steel Worker
Fitter Structural Steel
Blacksmith
Boiler Maker
Heat Treater Annealer Temperer
Drop Hammer Oper.
Forging Press Oper.
Upsetter
Die Setter
Machine Tool Setter, Metal
Setter, Molding & Coremaking Mach.
Punch Press Set-up Metal
Shear &/or Slitter Set up
Plastic Molding Set-up
Machinist Automotive
Mach. Tool Oper. Tool Room
Metal Mold Maker/Repairer
Machinist
Molder Bench &/or Floor
Molder Mach.
Molder Pattern
Sand Slinger Oper.
Sheel Mold &/or Shellcore Mach Op
Lay-out Worker (Metal)
Pattern Maker Metal
Pattern Maker Wood
Sheet Metal Worker
Tool & Die Maker
Die Maker
Die Sinker
Instrument Maker
Forging Straightening Roll Oper.
Roller Primary Mill
Rolling Mill Oper. Rough or Finish
Rougher Operator, Billet
Seamless-Tube Roller
Furnance Install & Repair
Oil Burner Install Service
Body Repairer, Automotive
Jeweler &/or Silversmith
Watchmaker
Stone Setter
Machine Setter (Woodworking)
Drill Press & Boring Mach Oper.
Carbon Furnace Oper.
Caster Ingots & Pigs
Centrifugal-Casting Mach Oper.
Steel Pourer Helper
Tapper Furnace & Reduction Pots
Furnace Op &/or Cupola
Mixer Ore & Metals
Charger Operator
Heating Pit Charger
Pourer Metal
Grinding or Abrading Mach Op
Lathe Op. Grinding Wheels
Lathe &/or Turning Mach Oper
Milling & Planning Mach Oper
Shaper &/or Router Oper.
Gear Cutter Gear Grinder
Electroplater
Boring Mach Oper.
Mach Tool Oper. Combination
Mach Tool Oper, Numerical
Machinist, Wood
Incising Mach Oper.
Punch Press Oper. Metal
Pwr. Brk &/or Bending Mach Oper
Shear &/or Slitter Oper
Trimmer Plastic
Filers, Grinders, Buffers, Cleaners
Die Polisher, Wire &/or Tubes
Saw Filer
Sand Mixer Hand or Mach
Painter Automotive
Riveter Light
Riveter, Heavy
Sawyer Metal
Sawyer Plastic
Kiln Oper Clay Lime Etc.

METALS cont.

Painter Automotive
Riveter Light
Riveter, Heavy
Sawyer Metal
Sawyer Plastic
Kiln Oper Clay Lime Etc.
Rotary Kiln Operator (Metal)
Vacuum Plastic Forming Machine Op
Finisher Mach.
Compression/Injection Molding Op
Extruder Oper Helper
Rubber Goods Cutter Finisher
Cage Maker Hand or Mach.
Hydraulic Press Oper Abrusives
Bed Oper
Pot Tender
Drier Tender
Cryclite Recovery Oper
Draw Bench Oper Tube Drawer
Carbon Setter
Core Maker Mach.
Pickler, Continuous Pickling Line
Diecast Maker &/or Diecast Set-up
Dip Plater
Bodymaker Oper Tin Can
Wire Weaver
Heater Metal
Roll Forming Mach Op
Core Maker Hand Bench Etc.
Laminator Preforms
Vulcanizer Rubber Plate
Sandblaster &/or Shotblaster
Body Repairer Helper, Auto
Catcher
Caster Pottery & Porcelain
Concrete Pipe Maker
Fabricator Plastics
Mold Closer
Mold Maker, Brick, Tile, Concrete
Plater Helper
Pot Liner
Rolling-Mill Op Helper, Rough/Fin.
Wax Pattern Worker
Wire Drawer
Caster
Finisher Hand
Furnace Op or Heater Help
Mold and Weight Shifter

CHILD CARE

Child Care Attendant
Child Care Worker

CLOTHING

Instructor Textile & Apparel
Designer
Shade Ticket Marker
Furrier
Alteration Tailor
Master Tailor
Sample Maker
Furniture Upholsterer
Springer Furniture
Upholstery Trimmer
Casket Cover / Liner
Upholsterer
Upholstery Cutter
Mattress Maker
Cutter Hand
Card, Comb Tender/ Card Stripper
Knitter, Full Fashion Garmets
Knitting Mach Oper
Seamer Machine
Bobbin Winders
Creeler Yarn
Dresser Tender
Spinner Frame
Winder Oper Auto
Yarn Winder
Weaver
Cutter Portable Mach
Cutter Stationary Mach
Die Cutter &/or Clicking Mach Op
Pattern Cutter
Sewer, Custom
Sewing Mach Op Reg Equip
Sewing Mach Op, Auto & Spec Equip
Sewing Machine Op Nongarment
Dye Tank Tender
Skein Yarn Dryer
Marker, Classifier, Wet Wash Assem.
Spotter Dry Cleaning
Spotter Washable Materials
Washer Machine &/or Starcher
Tumbler Oper.
Dry Cleaning Machine Oper
Dry Clearner, Hand
Laundry Operator Small Est.
Rug Cleaner Hand
Rug Cleaner Machine
Folder
Furniture Cleaner
Washer Synthetic Fabrics
Mender
Sewing Ma Op Regul Eqp Etc.
Garment Repair
Hand Sewer

CLOTHING cont.

Blending Mach Oper.
Spreader Cloth
Fusing Mach Oper.
Turner Sewn Articles
Folder Hand
Folding Mach Op Textile Goods
Screen Printer Textile
Thread Trimmer
Marker Cloth & Paper
Surgical Leather Worker
Mach. Presser
Presser Hand &/or Blocker
Mach. Presser Laundry
Hand Presser
Pleating Mach Oper
Shaper & Presser

INST. & HOME MGMT.

Cleaner, Housekeeping
Cleaner, Heavy
Cleaner, Light
Window Washer
House Cleaner
Waxer Floor
Janitors Porter & Cleaners
All Other Janitors, Porter, & Cln.
Housekeeper

DRAFTING

Drafter
Architect Landscape
Architect

GRAPHIC ARTS

Camera Operator (Television)
Commercial Artist
Photographer
Photographer, Portrait/Commercial
Estimator Printing Service
Copy Cutter
Customer Svc. Rep. Printing
Bookbinder
Compositor &/or Typesetter
Phototypesetter Oper.
Hand Compositor
Imposer & Make-up Arranger
Linecasting Mach Oper
Linecasting Mach Tender
Photo Typesetting Monitor
Photo Typesetter Oper.
Bindery Mach Set-up
Stereotyper
Stripper
Camera Operator
Photoengraver
Press Operator &/or Plate Printer
Offset Lithographic Press Oper.
Platemaker
Letter Press Operator
Letterset Press Operator
Steel Die Press Operator
Motion Pic Projection
Screen Cutter
Developing Mach. Per
Developer &/or Projection Printer
Photograph Retoucher Etc.
Negative Cutter & Spotter
Mult. Photo Print Oper.
Print Developer Machine
Photo Checker & Assembler
Photographer Helper
Copy-Camera Operator
Blue Printing Machine Oper
Film Viewer & Film Inspector
Photostat Oper.
Paste-up Copy-Camera Operator
Artist
Etcher &/or Engraver Mach.
Screen Printer
Screenmaker Photo
Silk Screen Prnt. Electronic
Bindery Worker
Photolettering Mach. Oper.
Press Assistants & Feeders

SERVICE OCCUPATIONS

Dispatcher Police Fire Ambulance
Teacher, College, Jr. College Univ.
Teacher Adult Education
Teacher, Elementary School
Teacher, Secondary School
Graduate Assistant
Teacher, Voc, Ed.
Dance Instructor
Instructor Automobile Driver
All Other Teachers
Extension Service Specialist
Sports Instructor
Librarian
Clergy

SERVICE OCCUPATIONS cont.

Parish Worker
Director of Religious Act. & Recr.
Judge
Magistrate
Law Clerk
Lawyer
Employment Interviewer
Personnel & Labor Relations Spec.
Paralegal Personnel
Director, Camp
Recreation Leader
Group or Recreation Worker
Group Recreation Worker
Case Worker
Welfare Investigator
Community Organization Worker
Eligibility Worker Welfare
Social Service Aide
Claims Taker Unemployment Benefit
Audio Visual Specialist
Vocational & Educational Council
Train Conductor
Director, Community Etc.
Travel Consultant
Dispatcher Motor Trans
Dispatcher Vehicle Service/Work
Taxicab Starter
Library Assistant
Tech. Ass., Library
Travel Clerk
Travel Counselor
Teachers Aide
Ticket Agent
Station Agent
Transportation Agent
Reservations Agent
Ship Fitter
Shoe Dryer
Shoe Repairer
Assembler-Puller Over, Hand/Mach
Stitcher Standard Mach
Conveyor Operator Dummy OES COD
Trimmer Mach
Bus Driver
Parking Lot Attendant
Chauffeur, Funeral Car
Chauffeur
Taxi Driver
Recreation Facilities Attendant
Ride Operator
Finchaser
Desk Clerk, Bowling Floor
Lifeguard
Usher, Lobby Attend, Ticket Taker
Bellhop Baggage Porter
Luggage Porter
Barber
Cosmetologist &/or Hairsy.
Manicurist
Scalp Treatment Oper
Wig Dresser
Shampooer
Mortuary Beautician
Funeral Attendant
Masseur or Masseuse
Lecturer Weight Watcher
Instructor Reducing
Checkroom Attendant
Guide, Sightseeing
School Crossing Guard
Crossing or Bridge Tender
Guards & Doorekeepers
Armored Car Guard
Correction Officer/Jailer
All Other Guards
US Marshall
Detective
Police Officer
Police Officer I
Parking Enforcement Officer
Store Detective
Police Detective
Bailiff
Sheriff
All Other Service Workers
Cleaner, Vehicle

FOREST PRODUCTS

Timber Cruiser
Forester & Conservation Scientist
Forest Conservation Worker
Hook Tender
Loader Engineer
Yarker Engineer
Log Inspector Grader/Scaler
Lumber Grader
Veneer Grader
Lathe Oper Wood
Core Layer &/or Sheet Turner
Carving Mach Oper
Clipper, Automatic
Corrugator Knife Oper
Mortising Mach Oper
Slitter Geaser Slotter Oper
Tenoner Oper
Wood Mach Oper
Sander Wood
Stone Polisher

FOREST PRODUCTS cont.

Veneer Sanders
Band Scroll Saw Oper
Bolter
Cut-off Saw Oper
Cut-off Sawyer Log
Pony Edger
Gang Sawyer
Head Sawyer
Resawyer
Ripsaw Oper
Trimmer
Variety Saw Oper
Kiln Oper Lumber
Paper Reel Oper &/or Rewinder Op
Treating Engineer
Veneer Drier
Veneer Repairer Mach
Hot plate Plywood Press Oper
Edge Gluer
Barker Oper
Dowel Mach Oper
Dado Oper
Hydraulic Press Oper Veneer
Glueing Mach Oper
Core Feeder Plywood
Veneer Lathe Oper
Veneer Jointer Oper
Planer Operator Lumber
Press Operator, Hardboard
Pulp Refiner Oper
Pulper
Recovery Oper Papermaking
Super Calender Oper
Wet Mach Tender
High Density Finishing Oper
Evaporator Oper Papermaking
Wood Grinder Operator
Fourorinier Mach Tender
Back Tender
Air-Drier-Mach Tender
Drier Oper Insulation Board
Beater
Beater Engineer
Bleacher, Groundwood Pulp
Digester Oper or Cook
Coater Off-Mach Oper
Coater Oper Insulation
Panel Mach Oper Etc. Paper
Ruling Mach Oper
Taping Mach Oper
Waxing Mach Oper
Flexo Folder Gluer
Envelope Mach Oper
Embosser Oper
Folding Mach Oper Paper
Folding Mach Feeder
Bag Mach Oper
Automatic Mach Attendant
Box Maker Paper Board
Cylinder-Die-Machine Oper
Carton Forming Mach Oper
Corrugator Op
Combiner Oper
Brown-Stock Washer/Blow-Pit Tend
Stripping Mach Oper
Fourth/Fifth Hand
Scrapper/Stripper
Envelope Finishing Mach. Oper
Corner Cutter
Cut-Off Mach Oper
Chipper, Log
Gluer
Digester Oper Helper
Transfer Controller
Veneer Repairer Hand
Pattern Marker I (Wood)
Furniture Assembler & Installer
Log Handling Equip Oper
Lumber Straightener
Off Bearer Millwork
Stacker Oper Kiln
Veneer Drier Feeder
Chaser Lumber
Choked Setter
Decker Operator
Log Roller
Faller &/or Bucker
Head Loader
High Climber
Pond Worker
Rigging Slinger
Second Loader
Shake-out Worker

OTHER

Chemical Engineer
Traffic Engineer
Mining Engineer
Engineers
All Other Engineers
Meteorologist
Chemist
Geologists & Geophysicists
Oceanorapher
Physicist
Natural & Mathematical Scientist
Physical Scientists

OTHER cont.

All other Physical Scientists
All other Life Scientist
Mathematician
All other Mth Scientist
Statistician
Tester
Engineering Technicians
Science Technician
Physical Science Tech
Watershed Tenders
Radiographer
Airplane Pilot
Air Traffic Controller
Traffic Technician
Spectroscopist
All other Engineering Tech
All other Science Technicians
All Other Technicians
Economist
Actor or Actress
Writer &/or Editor
Film Editor
Reporters & Correspondents
Choir Leader/Choral Director
Musician Instrumental
Singer
Anouncer
Broadcast News Analyst
All other Professional
Public Admin Inspector Exc Const
Manager Branch Office
Business Agent
Managers & Officers
Manager Engineering
Manager Operations
Manager Scientific
Yard Supervisor
All other Managers & Officers
Box Estimator
Scrip Assistant
Supervisor, Nonworking Service
Supervisor, Nonworking Exc Service
Drapery Hanger
Yard Engineer
Locomotive Engineer
Inspector
Bolter
Piano Tuner
Cutter Dummy OES Code
Saddle Maker
All other Skilled Workers
Selector Glass
Sorter Clay & Pottery
Sorter Upholstery Parts
Sorting Mach Oper
Scrap Sorter
Crater
Prod Packager
Bundler
Wrapping Mach Oper
Asbestos & Insulation Workers
Assembler
Plastic Top Installer
Power Screw Driver Oper
Spring Mach Oper
Blaster, Mining and Quarrying
Blaster Construction
Cutter Oper
Crusher Tender &/or Breaker
Loading Machine Oper
Mill &/or Grnd Opr.
Separator Tender
Crusher Tender/Ore Stp/Scale
Panelboard Opr. & Grnd Mill Oper
Mixer Clay & Relate Prod
Rubber Compounder
Plasger Mixer, Machine
Mixer Tobacco
Nail Making Oper
Stapler, Mattress and Bedspring
Stapling Mach Oper
Convolute Tube/Spiral Tube winder
Conveyor Op.
Filter Oper
Extruder Oper
Evaporator Op Chemical
Kettle Oper Adhesive
Gramulator Mach Oper
Compressor
Pumper, Liquids
Still Op Batch or Continuous
Chemical Oper Helper
Truck Driver
Truck Driver, Heavy
Truck Driver, Light
Tractor Trailer Truck Driver
All other Truck Drivers
Industrial Truck Operator
Carrier Driver